

## United States Patent and Trademark Office

een

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/562,748	12/29/2005	Jerome Delamare	39291	7709
116 7590 06/04/2007 PEARNE & GORDON LLP 1801 EAST 9TH STREET			EXAMINER	
			BARRERA, RAMON M	
SUITE 1200 CLEVELAND	, OH 44114-3108	•	ART UNIT	PAPER NUMBER
,,,			2832	
			MAIL DATE	DELIVERY MODE
			06/04/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

	Application No.	Applicant(s)
	10/562,748	DELAMARE ET AL.
Office Action Summary	Examiner	Art Unit
	Ramon M. Barrera	2832
The MAILING DATE of this communication Period for Reply	appears on the cover sheet w	ith the correspondence address
A SHORTENED STATUTORY PERIOD FOR REWHICHEVER IS LONGER, FROM THE MAILING  Extensions of time may be available under the provisions of 37 CFF after SIX (6) MONTHS from the mailing date of this communication  If NO period for reply is specified above, the maximum statutory period for reply within the set or extended period for reply will, by st Any reply received by the Office later than three months after the mearned patent term adjustment. See 37 CFR 1.704(b).	ODATE OF THIS COMMUNION R 1.136(a). In no event, however, may a red of the community of the	CATION.  reply be timely filed  ITHS from the mailing date of this communication.  BANDONED (35 U.S.C. § 133).
Status		
Responsive to communication(s) filed on _     This action is <b>FINAL</b> . 2b)⊠ ↑     Since this application is in condition for allo closed in accordance with the practice under	This action is non-final.  wance except for formal mat	•
Disposition of Claims		
4)  Claim(s) 1-28 is/are pending in the applicate 4a) Of the above claim(s) 9-17 and 20-28 is 5)  Claim(s) is/are allowed.  6)  Claim(s) 1-8,18 and 19 is/are rejected.  7)  Claim(s) is/are objected to.  8)  Claim(s) are subject to restriction and	s/are withdrawn from consider	ration.
Application Papers		
9) ☐ The specification is objected to by the Exam 10) ☑ The drawing(s) filed on 29 December 2005  Applicant may not request that any objection to  Replacement drawing sheet(s) including the cor  11) ☐ The oath or declaration is objected to by the	is/are: a)⊠ accepted or b)☐ the drawing(s) be held in abeyar rection is required if the drawing	nce. See 37 CFR 1.85(a). (s) is objected to. See 37 CFR 1.121(d).
Priority under 35 U.S.C. § 119		
<ul> <li>12) Acknowledgment is made of a claim for fore a) All b) Some * c) None of:</li> <li>1. Certified copies of the priority docum</li> <li>2. Certified copies of the priority docum</li> <li>3. Copies of the certified copies of the papplication from the International But</li> <li>* See the attached detailed Office action for a</li> </ul>	nents have been received. The sents have been received in Appriority documents have been reau (PCT Rule 17.2(a)).	pplication No received in this National Stage
Attachment(s)		
<ol> <li>Notice of References Cited (PTO-892)</li> <li>Notice of Draftsperson's Patent Drawing Review (PTO-948)</li> <li>Information Disclosure Statement(s) (PTO/SB/08)         Paper No(s)/Mail Date 12/29/05.     </li> </ol>	Paper No(	Summary (PTO-413) s)/Mail Date nformal Patent Application

Application/Control Number: 10/562,748

Art Unit: 2832

## **DETAILED ACTION**

Page 2

## Election/Restrictions

1. Applicant's election with traverse of group I, species II, in the reply filed on 5/22/07 is acknowledged. The traversal is on the ground(s) that claims 1 (group I) and 21 (group II) have common special technical features. This is not found persuasive because a determination of unity of invention is based on technical features that are allowable over the prior art (Rule 13.2). Currently, claim 1 has no technical features allowable over the prior art.

The requirement is still deemed proper and is therefore made FINAL.

2. Claims 9-17, 20-28 are withdrawn from further consideration pursuant to 37 CFR 1.142(b), as being drawn to a nonelected invention, there being no allowable generic or linking claim. Applicant timely traversed the restriction (election) requirement in the reply filed on 5/22/07.

## Claim Rejections - 35 USC § 103

- 3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
  - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 4. Claims 1-8 and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over FR2828000, cited on applicant's IDS, in view of Uozumi or Mohler.

FR2828000 discloses a magnetic actuator including a mobile magnetic portion 1, a fixed magnetic portion 3 provided with at least two attraction areas 3-2 for the mobile

Page 3

magnetic portion, and means 4 for triggering the displacement of the mobile magnetic portion, the mobile magnetic portion being in levitation when it is not in contact with an attraction area, characterized in that each attraction area has a geometry conjugate to that of the face of the mobile magnetic portion which must come into contact with it.

FR2828000 did not disclose where the mobile magnetic portion includes a magnet-based part with reduced magnet weight. Either Uozumi (col. 2, lines 27-30) or Mohler (col. 4, lines 36-65) disclose magnetic armatures with mass removed from noncritical portions of their volumes for the purpose of reducing their weight and increase their acceleration during energization. Since FR2828000, Uozumi, and Mohler are all from the same field of endeavor, the purpose disclosed by Uozumi or Mohler would have been recognized in the pertinent art of FR2828000. It would have been obvious at the time the invention was made to a person having ordinary skill in the art to employ in FR2828000 a mobile magnetic portion having a reduced mass for the purpose of reducing its weight and increase its acceleration during energization. The shape of the reduced portion, ie., holes, recesses, rectangular plate, etc., would have been an obvious matter of design choice, since applicant has not disclosed that the shape of the recess solves any stated problem or is for any particular purpose and it appears that the invention would perform equally well with recesses of multiple shapes. It would have been obvious to fill recesses with lesser density solid material to preserve the structural integrity of the armature against breakage.

Art Unit: 2832

5. Claim 19 is rejected under 35 U.S.C. 103(a) as being unpatentable over FR2828000, cited on applicant's IDS, in view of Uozumi or Mohler, and further in view of Uetsuhara, et al.

FR2828000, in view of Uozumi or Mohler, did not disclose at least one of the attraction areas includes a dielectric portion so as to achieve capacitive contact when the mobile magnetic portion (20) is stuck on said attraction area.

Uetsuhara, in fig. 9, discloses an attraction area including a dielectric portion 6 for achieving capacitive contact and reduced impact force when the mobile magnetic portion is stuck on said attraction area. It would have been obvious at the time the invention was made to one of ordinary skill in the art to employ a dielectric portion in FR2828000 in view of Uozumi or Mohler for the purpose of achieving a reduced impact force when the mobile magnetic portion is stuck on said attraction area and inherently providing a capacitive contact.

6. The prior art made of record and not relied upon discloses armatures with reduced mass.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ramon M. Barrera whose telephone number is (571) 272-1987. The examiner can normally be reached on Monday through Friday from 11 to 5PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Elvin G. Enad can be reached on (571) 272-1990. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Application/Control Number: 10/562,748 Page 5

Art Unit: 2832

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Kamon MBanera Ramon M Barrera Primary Examiner Art Unit 2832

rmb